Trig 5.5

Evaluate inverse trig functions
Find missing angle measurements
Solve right triangles

special triangles/handy angles

reference angle

inverse function

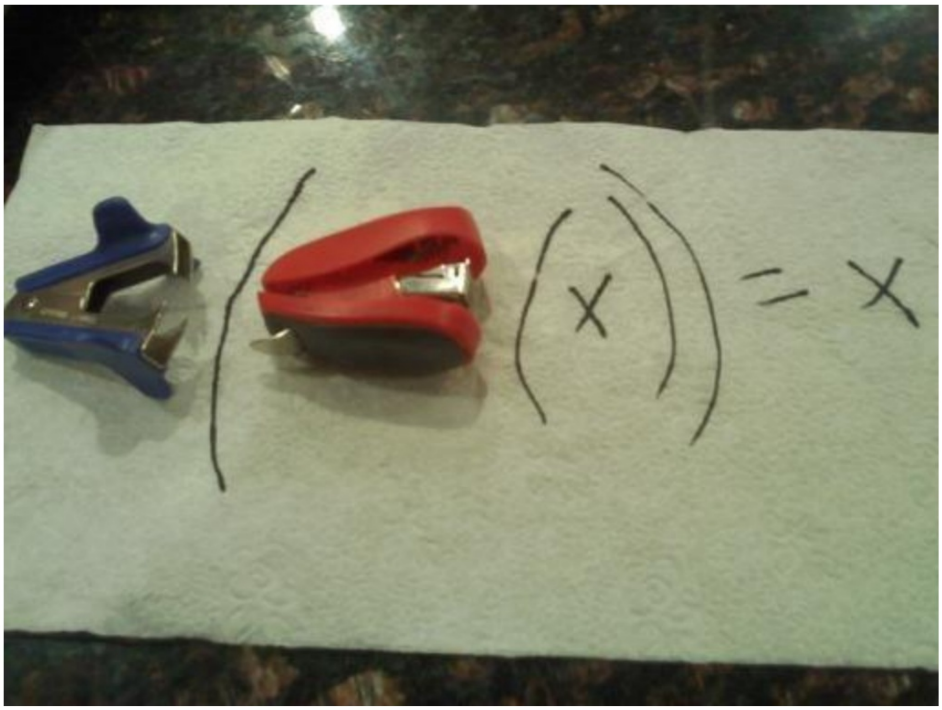
inverse sine = arcsin = $\sin^{-1}$

inverse cosine

inverse tangent

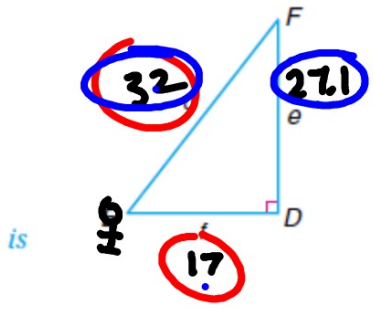
solving a triangle

whiteboards(?)



inverse

Find a specific value or "solve"



is

3 If $f = 17$ and $d = 32$, [redacted]

$e = 27.1$

$\angle E = 57.9°$

$\angle F = 32.1$

$17^2 + e^2 = 32^2$

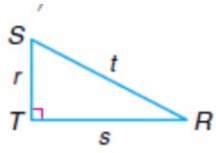
$e^2 = 785$

$\cos E = \frac{17}{32}$ $\sin F = \frac{17}{32}$

Solve each problem. Round to the nearest tenth.

9. If $r = 7$ and $s = 10$, find R.

10. If $r = 12$ and $t = 20$, find S.

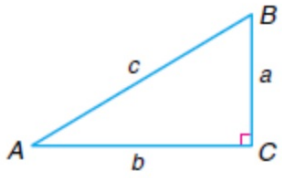


Solve each triangle described, given the triangle at the right. Round to the nearest tenth if necessary.

11. $B = 78°, a = 41$

12. $a = 11, b = 21$

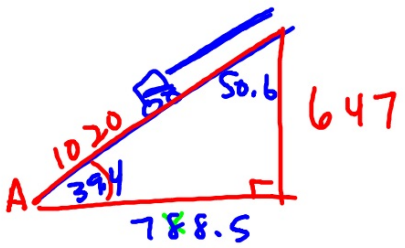
13. $A = 32°, c = 13$



Word problems

p. 310

(44)

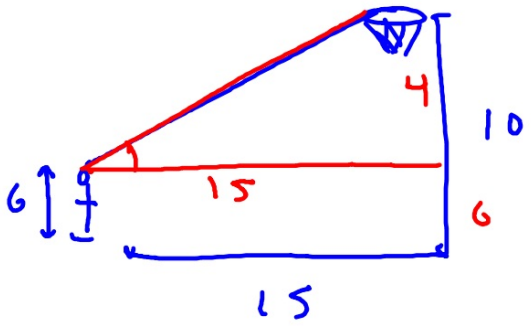


a) $\sin A = \frac{647}{1020}$ $A = 39.4$

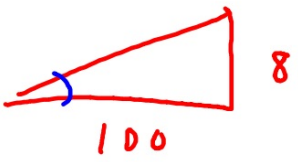
b) $x^2 + 647^2 = 1020^2$

$x^2 = 621,791$ 788.5 ft

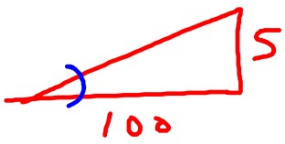
46.



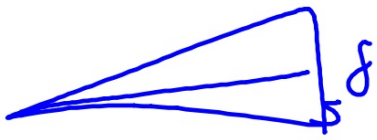
47.



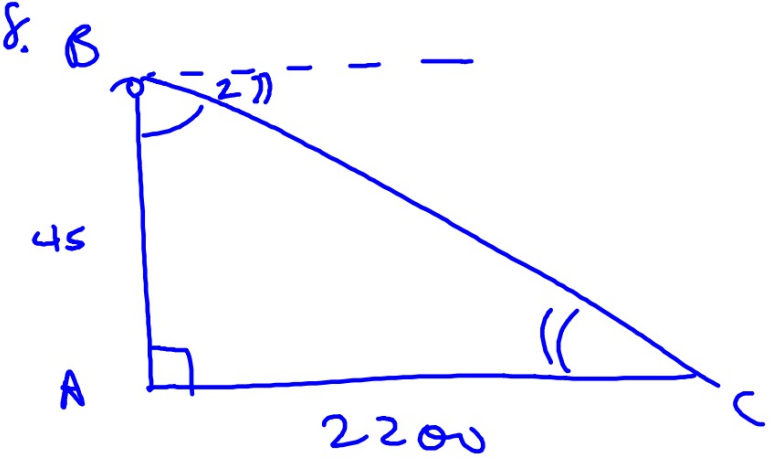
old



new



48.



WB+
47,49,52